REMARKS

Claims 62-72 and 85-89 are pending in the present application and at issue. It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

I. The Rejection of Claims 62-72 and 85-89 under 35 U.S.C. 103

Claims 62-72 and 85-89 are rejected under 35 U.S.C. 103 as being unpatentable over Baeck et al. (U.S. Patent No. 6,077,818) in view of Sando et al. (U.S. Patent No. 3,481,684) and further in view of Schneider et al. (U.S. Patent No. 6,165,761). This rejection is respectfully traversed for the reasons of record.

As provided in the prior response, Baeck et al. disclose a detergent composition comprising a cellulase and a cellulase termination composition, wherein the cellulase terminator composition comprises a peroxidase, an enhancer and a source of hydrogen peroxide. Baeck et al. further disclose that the source of hydrogen peroxide may be a hydrogen peroxide-generating enzyme such as an oxidase selected from the group consisting of glucose oxidase, urate oxidase, galactose oxidase, alcohol oxidase, amine oxidase, amino acid oxidase, amyloglucosidase and cholesterol oxidase (*see* column 8, lines 55-65). In addition, Baeck et al. disclose that the detergent composition may further comprise a lipoxygenase.

Thus, Baeck et al. do not teach or suggest a process for manufacturing a textile. Fabrics are washed with a detergent composition after they are manufactured. In other words, washing is not a step in a textile manufacturing process.

Moreover, the oxidases disclosed in Baeck et al. do not have activity against a monosaccharide and at least one of disaccharides and oligosaccharides.

Sando et al. merely disclose that "it is conventional to scour, bleach and then alkaline treat cotton and cellulosic fabrics." However, Sando et al. also do not teach or suggest a process for manufacturing a textile using a carbohydrate oxidase, wherein the carbohydrate oxidase is active towards at least one monosaccharide and at least one of disaccharides and oligosaccharides.

Schneider et al. disclose a carbohydrate oxidase obtained from *Microdochium* and its use in baking. However, Schneider et al. also do not teach or suggest a process for manufacturing a textile using a carbohydrate oxidase, wherein the carbohydrate oxidase is active towards at least one monosaccharide and at least one of disaccharides and oligosaccharides.

There are many carbohydrate oxidases which produce hydrogen peroxide, however, there is no suggestion that a particular carbohydrate oxidase would be more advantageous in a textile

manufacturing process. Because Applicants' process uses a carbohydrate oxidase which is active against a monosaccharide and at least one of disaccharides and oligosaccharides, the bleaching process is more efficient. For example, the carbohydrate oxidase can use a monosaccharide and a disaccharide and/or oligosaccharide produced *in situ* in the desizing and/or scouring steps in the bleaching process. Thus, it is not necessary to add a substrate for the carbohydrate oxidase. These results are not predicted by the prior art, and therefore are surprising and unexpected.

In response to Applicants' arguments, the Office states that "applicant has not provided experimental data to support this conclusion [of surprising and unexpected results] and claim 64 requires a substrate."

Applicant submit a Declaration under 37 C.F.R. 1.132 of Dr. Yucheng Zhou, which describes experiments conducted under his direction and supervision, to compare the bleaching performance of an *Aspergillus niger* glucose oxidase (GOX) and a *Microdochium nivale* carbohydrate oxidase (COX) on knitted fabric and woven fabric (paragraphs 4 and 5 of the Zhou Declaration, respectively).

As explained in paragraph 4, the results of the experiments on knitted fabric "show that the *Microdochium nivale* carbohydrate oxidase (COX) has a better bleaching performance than the *Aspergillus niger* glucose oxidase (GOX) at the same protein load. In particular, the CIE whiteness using COX was 46.11 and 46.58 and the CIE whiteness using GOX was 40.47 and 40.61. Thus, COX increased the CIE whiteness by approximately 6 units compared with GOX."

In addition, as explained in paragraph 5, the results of the experiments on woven fabric "show that *Microdochium nivale* carbohydrate oxidase (COX) has a better bleaching performance than the *Aspergillus niger* glucose oxidase (GOX) at the same protein load. In particular, the CIE whiteness using COX was 39.77 and 40.15 and the CIE whiteness using GOX was 28.43 and 31.52. Thus, COX increased the CIE whiteness by approximately 8-12 units compared with GOX treatment."

Dr. Zhou states that the results of these experiments are "surprising and unexpected."

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 103. Applicants respectfully request reconsideration and withdrawal of the rejection.

II. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

All required fees were charged to Novozymes North America, Inc.'s Deposit Account No. 50-1701 at the time of electronic filing. The USPTO is authorized to charge this Deposit Account should any additional fees be due.

Respectfully submitted,

Date: September 27, 2010

/Elias Lambiris, Reg. # 33728/
Elias J. Lambiris, Reg. No. 33,728
Novozymes North America, Inc.
500 Fifth Avenue, Suite 1600
New York, NY 10110
(212) 840-0097